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<140> PCT/US02/14927  
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<150> US 60/290,363  
<151> 2001-05-11  
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Met Leu Glu Lys Met Gly Trp Ser Lys Gly Lys Gly Leu Gly Ala Gln  
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Glu Gln Gly Ala Thr Asp His Ile Lys Val Gln Val Lys Asn Asn His  
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Leu Gly Leu Gly Ala Thr Ile Asn Asn Glu Asp Asn Trp Ile Ala His  
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Gln Asp Asp Phe Asn Gln Leu Leu Ala Glu Leu Asn Thr Cys His Gly  
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Gln Glu Thr Thr Asp Ser Ser Asp Lys Lys Glu Lys Lys Ser Phe Ser  
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Leu Glu Glu Lys Ser Lys Ile Ser Lys Asn Arg Val His Tyr Met Lys  
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Phe Thr Lys Gly Lys Asp Leu Ser Ser Arg Ser Lys Thr Asp Leu Asp  
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Cys Ile Phe Gly Lys Arg Gln Ser Lys Lys Thr Pro Glu Gly Asp Ala  
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Ser Pro Ser Thr Pro Glu Glu Asn Glu Thr Thr Thr Ser Ala Phe  
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Thr Ile Gln Glu Tyr Phe Ala Lys Pro Val Ala Ala Leu Lys Asn Lys  
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Pro Gln Val Pro Val Pro Gly Ser Asp Ile Ser Glu Thr Gln Val Glu  
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Arg Lys Arg Gly Lys Lys Arg Asn Lys Glu Ala Thr Gly Lys Asp Val  
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Glu Ser Tyr Leu Gln Pro Lys Ala Lys Arg His Thr Glu Gly Lys Pro  
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Glu Arg Ala Glu Ala Gln Glu Arg Val Ala Lys Lys Lys Cys Ala Pro  
245 250 255

Ala Glu Lys Gln Leu Arg Gly Pro Cys Trp Asp Gln Ser Ser Lys Ala  
260 265 270

Ser Ala Gln Asp Ala Gly Asp His Val Gln Pro Pro Glu Gly Arg Asp  
275 280 285

Phe Thr Leu Lys Pro Lys Lys Arg Arg Gly Lys Lys Leu Gln Lys  
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Glu Gln Gly Gly Pro Asp Asp Ile Lys Val Gln Val Lys Asn Asn Asp  
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Leu Gly Leu Gln Ala Thr Ile Asn Asn Glu Ala Asn Trp Ile Ala His  
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Gln Asp Asp Phe Asn Trp Leu Leu Ala Glu Leu Asn Thr Cys Gln Arg  
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Gln Glu Thr Ala Asp Ser Leu Asp Asn Lys Lys Lys Lys Tyr Phe Ser  
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Leu Glu Glu Ile Pro Lys Ser Ser Lys Asn Cys Val His His Arg Lys  
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Phe Thr Lys Glu Lys Asp Leu Ser Ser Arg Ser Lys Thr Asp Arg Asp  
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Cys Ile Phe Gly Lys Lys Gln Ser Lys Lys Thr Pro Glu Gly Asn Ser  
145 150 155 160

Ser Pro Ser Thr Pro Asp Lys Asn Lys Thr Thr Met Thr Thr His Ala  
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Phe Thr Ile Gln Glu Arg Phe Ala Lys Arg Met Ala Ala Leu Lys Asn  
180 185 190

Lys Pro Gln Val Ala Ala Pro Gly Pro Asp Ile Ser Lys Thr Gln Val  
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Glu Cys Lys Arg Gly Lys Lys Arg Asn Lys Glu Ala Thr Gly Lys Asn  
210 215 220

Gly Glu Ser Tyr Pro Pro Thr Gln Pro Lys Ala Lys Arg Pro Lys Glu  
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Gly Lys Pro Lys Arg Asp Lys Val Gln Lys Ser Ala Ser Lys Glu Lys  
245 250 255

Arg Ala Arg Thr Asp Gly Gln Cys Arg Gly Leu Cys Trp Glu Glu Ser  
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Ser Glu Ala Ser Ala Gln Gly Ala Gly Asn Cys Val Gln Pro Pro Asp  
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Leu Glu Lys Phe Gly Trp Lys Pro Gly Met Gly Leu Gly Leu Ser Pro  
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Met Asn Ser Asn Thr Ser His Ile Lys Val Ser Ile Lys Asp Asp Asn  
50 55 60

Val Gly Leu Gly Ala Lys Leu Lys Arg Lys Asp Lys Lys Asp Glu Phe  
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Asp Asn Gly Glu Cys Ala Gly Leu Asp Val Phe Gln Arg Ile Leu Gly  
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Arg Leu Asn Gly Lys Glu Ser Lys Ile Ser Glu Glu Leu Asp Thr Gln  
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Arg Lys Gln Lys Ile Ile Asp Gly Lys Trp Gly Ile His Phe Val Lys  
115 120 125

Gly Glu Val Leu Ala Ser Thr Trp Asp Pro Lys Thr His Lys Leu Arg  
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Asn Tyr Ser His Ala Lys Asn Arg Lys Arg Glu Gly Asp Asp Ser Glu  
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Asp Glu Asp Asp Ala Asp Gln Glu Asp Lys Asp Ser Asp Lys Lys Lys  
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His Lys Lys His Lys Lys His Lys Lys Asp Lys Lys Lys Asp Lys Lys  
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Ala Lys Lys Glu His Lys Lys His Lys Lys Glu Glu Lys Arg Leu Lys  
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Lys Glu Lys Arg Ala Glu Lys Thr Lys Glu Thr Lys Lys Thr Ser Lys  
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Leu Lys Ser Ser Glu Ser Ala Ser Asn Ile Pro Asp Ala Val Asn Thr  
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Arg Gly Leu Gly Ala Asp Lys Met Ala Asp Tyr Asp Ser Thr Trp Ile  
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Ser His His Asp Asp Phe Ala Asp Leu Leu Ala Ala Leu Asn Lys Asn  
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Lys Glu Gln Glu Pro Glu Gln Thr Glu Glu Lys Asn Ala Ala Ala  
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Glu Lys Ile Ser Ile Glu Leu Lys Ser Lys Ser Ile Arg Arg Arg Ile  
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Asp Ser Ser Asp Ser Gln Ala Asp Ser Gln Glu Lys Lys Glu Gly Asn  
180 185 190

Asn Thr Val Ser Thr Leu Ser Val Gly Asp Tyr Phe Ala Ala Lys Met  
195 200 205

Ala Ala Leu Lys Ala Lys Arg Glu Ala Ala Ala Asn Gln Thr Glu  
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Val Lys Met Glu Ile Lys Thr Glu Val Glu Glu Glu Ser Asp Glu  
225 230 235 240

Glu Lys Ala Arg Arg Lys Ala Glu Lys Lys Glu Arg Lys Arg Leu Arg  
245 250 255

Arg Glu Gln Arg Asp Lys Glu Glu Thr Leu Glu Thr Val Glu Thr Ile  
260 265 270

Leu Glu Val Lys Gln Glu Val Lys Glu Glu Ile Ile Asp Glu Glu Phe  
275 280 285

Asp Glu Ala Glu Arg Lys Arg Leu Lys Lys Glu Lys Lys Arg Leu Lys  
290 295 300

Arg Leu Arg Glu Gln Gln Gln Pro Glu Asn Glu Gly Ala Glu Gly Gly  
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Asp Glu His

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Val Gln Val Gly Ala Pro Glu Glu Glu Glu Glu Glu Asp Ala  
50 55 60

Gly Leu Val Ala Glu Ala Glu Ala Val Ala Ala Gly Trp Met Leu Asp  
65 70 75 80

Phe Leu Cys Leu Ser Leu Cys Arg Ala Phe Arg Asp Gly Arg Ser Glu  
85 90 95

Asp Phe Arg Arg Thr Arg Asn Ser Ala Glu Ala Ile Ile His Gly Leu  
100 105 110

Ser Ser Leu Thr Ala Cys Gln Leu Arg Thr Ile Tyr Ile Cys Gln Phe  
115 120 125

Leu Thr Arg Ile Ala Ala Gly Lys Thr Leu Asp Ala Gln Phe Glu Asn  
130 135 140

Asp Glu Arg Ile Thr Pro Leu Glu Ser Ala Leu Met Ile Trp Gly Ser  
145 150 155 160

Ile Glu Lys Glu His Asp Lys Leu His Glu Glu Ile Gln Asn Leu Ile  
165 170 175

Lys Ile Gln Ala Ile Ala Val Cys Met Glu Asn Gly Asn Phe Lys Glu  
180 185 190

Ala Glu Glu Val Phe Glu Arg Ile Phe Gly Asp Pro Asn Ser His Met  
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Pro Phe Lys Ser Lys Leu Leu Met Ile Ile Ser Gln Lys Asp Thr Phe  
210 215 220

His Ser Phe Phe Gln His Phe Ser Tyr Asn His Met Met Glu Lys Ile  
225 230 235 240

Lys Ser Tyr Val Asn Tyr Val Leu Ser Glu Lys Ser Ser Thr Phe Leu  
245 250 255

Met Lys Ala Ala Ala Lys Val Val Glu Ser Lys Arg Thr Arg Thr Ile  
260 265 270

Thr Ser Gln Asp Lys Pro Ser Gly Asn Asp Val Glu Met Glu Thr Glu  
275 280 285

Ala Asn Leu Asp Thr Arg Lys Arg Ser His Lys Asn Leu Phe Leu Ser  
290 295 300

Lys Leu Gln His Gly Thr Gln Gln Asp Leu Asn Lys Lys Glu Arg  
305 310 315 320

Arg Val Gly Thr Pro Gln Ser Thr Lys Lys Lys Glu Ser Arg Arg  
325 330 335

Ala Thr Glu Ser Arg Ile Pro Val Ser Lys Ser Gln Pro Val Thr Pro  
340 345 350

Glu Lys His Arg Ala Arg Lys Arg Gln Ala Trp Leu Trp Glu Glu Asp  
355 360 365

Lys Asn Leu Arg Ser Gly Val Arg Lys Tyr Gly Glu Gly Asn Trp Ser  
370 375 380

Lys Ile Leu Leu His Tyr Lys Phe Asn Asn Arg Thr Ser Val Met Leu  
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Ser Glu Asp

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**1929**